

June 26, 2007

Mr. Ken Theisen
On-Scene Coordinator
Emergency Response Branch
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604

**Subject: Final Removal Action Letter Report
Outboard Marine Corporation Site
Waukegan, Lake County, Illinois
Technical Direction Document No. S05-0608-001
EPA Contract No. EP-S5-06-03**

Dear Mr. Theisen:

The STN Environmental JV (STN) Superfund Technical Assessment and Response Team (START) has prepared this removal action letter report in accordance with the requirements of U.S. Environmental Protection Agency (EPA) Technical Direction Document (TDD) No. S05-0608-001. The scope of this TDD included (1) preparing a health and safety plan, (2) conducting oversight of soil and sediment removal activities, (3) collecting wipe samples, (4) documenting on-site conditions, and (5) preparing a removal action letter report for Outboard Marine Corporation (OMC) site in Waukegan, Lake County, Illinois. Removal activities were conducted by the Emergency and Rapid Response Services (ERRS) contractor, Environmental Quality Management, Inc. (EQM) and its subcontractor Clean Harbors Environmental Services. START activities were performed by T.N. & Associates, Inc., (TN&A), which is a member of STN.

This removal action letter report summarizes the site background; discusses the removal action activities, including sampling activities; and provides a summary of the removal action. Appendix A of this letter report presents a photographic log of removal action activities and Appendix B provides sample analytical results. Analytical services were procured by ERRS, EQM, Inc. and START received the results later from ERRS.



Site Background

The 124-acre OMC site is located near 200 Sea Horse Drive (Plant 1 address) in Waukegan, Lake County, Illinois. The OMC site is bordered to the north by a ditch (North Ditch) and the North Shore Sanitary District Plant; to the east by Lake Michigan public beaches; to the south by Sea Horse Drive; and to the west by the Elgin, Joliet, and Eastern Railroad. The OMC site consists of Plant 1, Plant 2, various other buildings, and the land surrounding the buildings. The Waukegan Coke Plant Superfund Site (owned by OMC) and the National Gypsum Company is located south of plant 2, between Sea Horse Drive and Plant 1. In December 2000, OMC filed for bankruptcy under Chapter 11 and ceased operations at Plant 2. Bombardier Motor Corporation (Bombardier) currently owns the former Plant 1 facility and also purchased assets in the former Plant 2 facility. The Plant 2 building is approximately 1,036,000 square feet in size; previous activities at the facility included aluminum die-casting, metal finishing, metal degreasing, spray painting, and shipping/receiving.

In December 2005, at the direction of U.S. EPA, soil was excavated from the lagoon area located outside the east end of the OMC property, where sewer line from the OMC building meets the lagoon. These excavation activities were conducted by ERRS contractor EQM. Soil samples were collected and analyzed for Polychlorinated Biphenyls (PCBs) before and after excavation to determine the extent of contamination and the effectiveness of the excavations.

In July 2006, the settling defendants for the adjacent "Waukegan Coke Plant Superfund Site" planned to build a water treatment plant on the contaminated portion of the OMC building. The EPA Remedial Project Manager requested assistance from the Emergency Response Branch when PCB-contaminated sludge was identified in the sewer lines leading from the OMC building to the lagoon. Analytical results indicated PCB concentrations as high as 130 parts per million (ppm) in the sewer line sludge sample. In August 2006, ERRS contractors removed all contaminated sludge from the sewer line and manholes. Contaminated water removed from the sewer was treated and discharged into a storm sewer at the site. A total of approximately 42,000 gallons of water was treated at the site. Contaminated sludge removed from the sewer was mixed with cleanup sand, which is PCB contaminated soil from a previous removal action, and Portland cement. Approximately 60 tons of waste material was transported to the Veolia Onyx Zion Landfill located in Zion, IL for disposal as non-TSCA waste; PCB concentrations less than 50 ppm are not regulated under the Toxic Substances Control Act (TSCA).

On December 11, 2006, EPA, ERRS contractor, and START conducted a site walk-through with potential subcontractors for the transformer removal activities.

Removal Action Activities

Removal action activities at the site included shipping out transformers stored inside the OMC building and on top of roof the building.

During the week of January 22, 2007, EPA, ERRS, START, and the ERRS Subcontractor mobilized to the site to conduct removal activities. Transformers stored in the OMC Plant No.2 building were loaded onto trucks and shipped to Clean Harbors PPM facility located near Cleveland, OH. Transformers located on top of the roof were removed using a crane and safely shipped to Clean Harbors PPM facility located near Cleveland, OH. This facility will clean the transformers and recycle the metal components.

START collected six wipe samples and one chip sample from the roof and transformers. The samples were stored in iced coolers and sent to Microbac Laboratories Inc., in Merrillville, Indiana for PCB analysis. ERRS were responsible for procuring the laboratory services and the analytical results. Wipe and chip samples were analyzed for PCB analysis by EPA SW-846 Method 8082 with a detection limit of 1 microgram per wipe ($\mu\text{g/wipe}$) and 3.3 milligrams per kilogram (mg/Kg), respectively. The analytical results were received by START from ERRS (see Table 1).

One of the four transformers located on the roof of OMC Plant No.2 was not removed because of the difficulty in accessing it by a crane. The transformer is located in the middle of the roof, about 150 feet from the closest edge. This transformer must be removed at a later date.

A total of 21 transformers were removed from the site and shipped to a disposal facility. START demobilized from the site on January 25, 2007.

Summary

A total of 21 empty transformers stored in the OMC Plant No.2 building and located on the roof were removed and shipped to Clean Harbors PPM facility located near Cleveland, OH for recycling purposes.

TABLE 1 PCB ANALYTICAL RESULTS OUTBOARD MARINE CORPORATION SITE, WAUKEGAN, LAKE COUNTY, ILLINOIS	
WIPE	PCB Result
	µg/wipe
W-1 Beam	3.4
W-2 BB-1	1.7
W-3 Ceiling	ND
W-4 BB-2	1.6
W-5 B-2	1.8
W-6 Ceiling 2	ND
SOLID	mg/Kg
Chip Sample 1	13

Notes:

µg/wipe = Microgram per wipe

mg/Kg = Milligram per kilogram dry sediment

PCB = Polychlorinated biphenyl

All analyses were conducted by Microbac Laboratories Inc., Merrillville, IN under TDD.No: S05-0608-002.

If you have any questions or comments regarding this letter report or require any additional information, please call me at (312) 220-7000 or send an e-mail to nbabu@tnainc.com.

Sincerely,



Naren Babu

Project Manager, STN Environmental JV

Appendix A Photographic Log

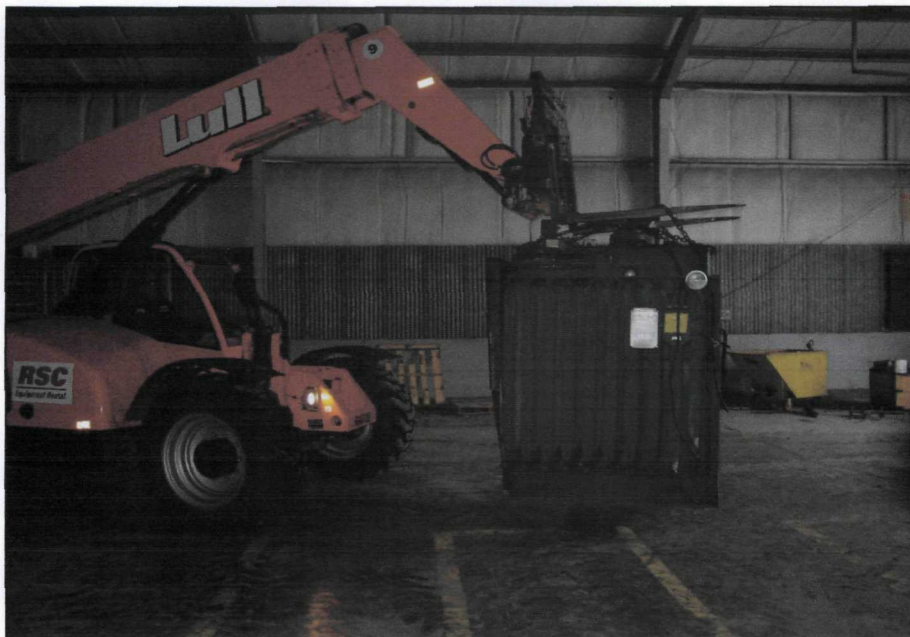
Appendix B Sample Analytical Results

cc: Lorraine Kosik, EPA START Project Officer

Raghu Nagam, STN START Program Manager



APPENDIX A
PHOTOGRAPHIC LOG
(4 Pages)



Photograph No.: 1 **Photographer:** Ron Bugg **Orientation:** West
TDD Number: S05-0608-001 **Contract:** EP-S5-06-03, STN JV **Date:** January 23, 2007
Site Name & Location: Outboard Marine Corporation Site, Waukegan, Lake County, Illinois
Subject: One of the transformers stored inside OMC Plant No.2 building was picked up and transported to a truck using a LULL forklift.



Photograph No.: 2 **Photographer:** Ron Bugg **Orientation:** South
TDD Number: S05-0608-001 **Contract:** EP-S5-06-03, STN JV **Date:** January 23, 2007
Site Name & Location: Outboard Marine Corporation Site, Waukegan, Lake County, Illinois
Subject: One of the transformers stored inside OMC Plant No.2 building was loaded onto a truck using a LULL forklift.



Photograph No.: 3 **Photographer:** Ron Bugg **Orientation:** North
TDD Number: S05-0608-001 **Contract:** EP-S5-06-03, STN JV **Date:** January 23, 2007
Site Name & Location: Outboard Marine Corporation Site, Waukegan, Lake County, Illinois.
Subject: Truck was covered and appropriate transportation placards were displayed as required by USDOT.



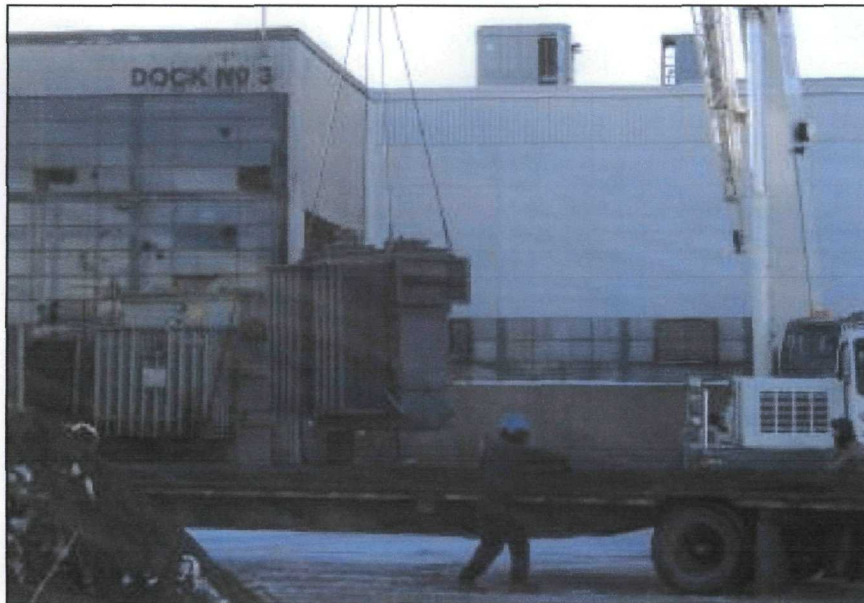
Photograph No.: 4 **Photographer:** Naren Babu **Orientation:** South
TDD Number: S05-0608-001 **Contract:** EP-S5-06-03, STN JV **Date:** January 24, 2007
Site Name & Location: Outboard Marine Corporation Site, Waukegan, Lake County, Illinois.
Subject: A "PCB warning" sign was posted on the side of the trucks transporting empty transformers.



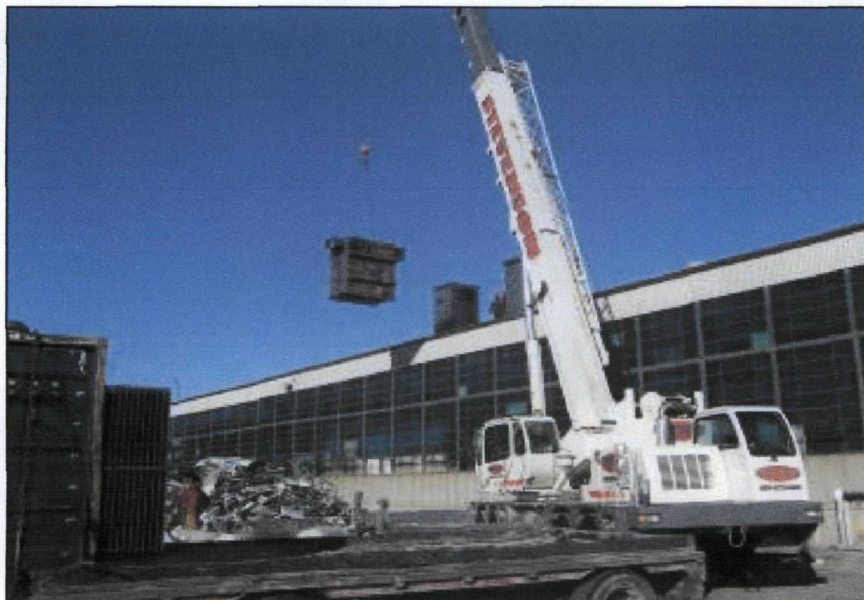
Photograph No.: 5 **Photographer:** Naren Babu **Orientation:** North
TDD Number: S05-0608-001 **Contract:** EP-S5-06-03, STN JV **Date:** January 24, 2007
Site Name & Location: Outboard Marine Corporation Site, Waukegan, Lake County, Illinois.
Subject: ERRS cutting metal parts and connections of transformers located on the roof of OMC Plant No.2 building using oxyacetylene gas burner.



Photograph No.: 6 **Photographer:** Naren Babu **Orientation:** South
TDD Number: S05-0608-001 **Contract:** EP-S5-06-03, STN JV **Date:** January 25, 2007
Site Name & Location: Outboard Marine Corporation Site, Waukegan, Lake County, Illinois.
Subject: One of the transformers located on the roof was picked up by a crane.



Photograph No.: 7 **Photographer:** Naren Babu **Orientation:** South
TDD Number: S05-0608-001 **Contract:** EP-S5-06-03, STN JV **Date:** January 25, 2007
Site Name & Location: Outboard Marine Corporation Site, Waukegan, Lake County, Illinois.
Subject: Transformer removed from the roof was loaded onto a flatbed trailer.



Photograph No.: 8 **Photographer:** Naren Babu **Orientation:** South
TDD Number: S05-0608-001 **Contract:** EP-S5-06-03, STN JV **Date:** January 25, 2007
Site Name & Location: Outboard Marine Corporation Site, Waukegan, Lake County, Illinois.
Subject: The transformers located on the roof facing Sea Horse Drive was picked up by a crane and loaded onto a truck.

APPENDIX B
SAMPLE ANALYTICAL RESULTS
(12 Pages)



January 24, 2007

Aaron Roski
Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati, OH 45240

Work Order No.: ME0701741

RE: OMC / Waukegan, IL
Dear Aaron Roski:

Microbac Laboratories, Inc. received 7 samples on 1/23/2007 5:02:00 PM for the analyses presented in the following report.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted. This report includes the numbered pages as well as the Cooler Inspection Report and Chain of Custody form(s).

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
Microbac Laboratories, Inc.

A handwritten signature in black ink, appearing to read "R. Misiunas", written over a horizontal line.

Ronald J. Misiunas
Client Services Manager

Enclosures



WORK ORDER SAMPLE SUMMARY

Date: Wednesday, January 24, 2007

CLIENT: Environmental Quality Management, Inc.
Project: OMC / Waukegan, IL
Lab Order: ME0701741

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
ME0701741-01A	W-1 BEAM		1/23/2007 1:25:00 PM	1/23/2007
ME0701741-02A	W-2 BB-1		1/23/2007 1:30:00 PM	1/23/2007
ME0701741-03A	W-3 CEILING		1/23/2007 1:35:00 PM	1/23/2007
ME0701741-04A	W-4 BB-2		1/23/2007 1:40:00 PM	1/23/2007
ME0701741-05A	W-5 B-2		1/23/2007 1:55:00 PM	1/23/2007
ME0701741-06A	W-6 CEILING 2		1/23/2007 2:00:00 PM	1/23/2007
ME0701741-07A	Chip Sample		1/23/2007	1/23/2007

ANALYTICAL RESULTS

Date: Wednesday, January 24, 2007

Client: Environmental Quality Management, Inc.
 Client Project: OMC / Waukegan, IL
 Client Sample ID: W-1 BEAM
 Sample Description:
 Sample Matrix: Wipe

Work Order / ID: ME0701741-01
 Collection Date: 01/23/07 13:25
 Date Received: 01/23/07 17:02

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
PCB'S							
		Method: SW8082	Prep Date/Time: 01/23/07 00:00 Analyst: AS				
Aroclor 1016	A	ND	1.0		µg/Area	1	01/24/07 01:03
Aroclor 1221	A	ND	1.0		µg/Area	1	01/24/07 01:03
Aroclor 1232	A	ND	1.0		µg/Area	1	01/24/07 01:03
Aroclor 1242	A	ND	1.0		µg/Area	1	01/24/07 01:03
Aroclor 1248	A	3.4	1.0		µg/Area	1	01/24/07 01:03
Aroclor 1254	A	ND	1.0		µg/Area	1	01/24/07 01:03
Aroclor 1260	A	ND	1.0		µg/Area	1	01/24/07 01:03
Aroclor 1262	A	ND	1.0		µg/Area	1	01/24/07 01:03
Aroclor 1268	A	ND	1.0		µg/Area	1	01/24/07 01:03
Total PCB's	A	3.4	1.0		µg/Area	1	01/24/07 01:03
Surr: Tetrachloro-m-xylene	S	90.0	35.2-147		%REC	1	01/24/07 01:03
Surr: Decachlorobiphenyl	S	85.0	5-159		%REC	1	01/24/07 01:03

ANALYTICAL RESULTS

Date: Wednesday, January 24, 2007

Client: Environmental Quality Management, Inc.
 Client Project: OMC / Waukegan, IL
 Client Sample ID: W-2 BB-1
 Sample Description:
 Sample Matrix: Wipe

Work Order / ID: ME0701741-02
 Collection Date: 01/23/07 13:30
 Date Received: 01/23/07 17:02

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
PCB'S							
		Method: SW8082	Prep. Date/Time: 01/23/07 00:00 Analyst: AS				
Aroclor 1016	A	ND	1.0		µg/Area	1	01/24/07 01:36
Aroclor 1221	A	ND	1.0		µg/Area	1	01/24/07 01:36
Aroclor 1232	A	ND	1.0		µg/Area	1	01/24/07 01:36
Aroclor 1242	A	ND	1.0		µg/Area	1	01/24/07 01:36
Aroclor 1248	A	1.7	1.0		µg/Area	1	01/24/07 01:36
Aroclor 1254	A	ND	1.0		µg/Area	1	01/24/07 01:36
Aroclor 1260	A	ND	1.0		µg/Area	1	01/24/07 01:36
Aroclor 1262	A	ND	1.0		µg/Area	1	01/24/07 01:36
Aroclor 1268	A	ND	1.0		µg/Area	1	01/24/07 01:36
Total PCB's	A	1.7	1.0		µg/Area	1	01/24/07 01:36
Surr: Tetrachloro-m-xylene	S	95.0	35.2-147		%REC	1	01/24/07 01:36
Surr: Decachlorobiphenyl	S	95.0	5-159		%REC	1	01/24/07 01:36

ANALYTICAL RESULTS

Date: Wednesday, January 24, 2007

Client: Environmental Quality Management, Inc.
 Client Project: OMC / Waukegan, IL
 Client Sample ID: W-3 CEILING
 Sample Description:
 Sample Matrix: Wipe

Work Order / ID: ME0701741-03
 Collection Date: 01/23/07 13:35
 Date Received: 01/23/07 17:02

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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PCB'S

Method: SW8082

Prep Date/Time: 01/23/07 00:00 Analyst: AS

Aroclor 1016	A	ND	1.0		µg/Area	1	01/24/07 02:03
Aroclor 1221	A	ND	1.0		µg/Area	1	01/24/07 02:03
Aroclor 1232	A	ND	1.0		µg/Area	1	01/24/07 02:03
Aroclor 1242	A	ND	1.0		µg/Area	1	01/24/07 02:03
Aroclor 1248	A	ND	1.0		µg/Area	1	01/24/07 02:03
Aroclor 1254	A	ND	1.0		µg/Area	1	01/24/07 02:03
Aroclor 1260	A	ND	1.0		µg/Area	1	01/24/07 02:03
Aroclor 1262	A	ND	1.0		µg/Area	1	01/24/07 02:03
Aroclor 1268	A	ND	1.0		µg/Area	1	01/24/07 02:03
Total PCB's	A	ND	1.0		µg/Area	1	01/24/07 02:03
Surr: Tetrachloro-m-xylene	S	175	35.2-147	S	%REC	1	01/24/07 02:03
Surr: Decachlorobiphenyl	S	185	5-159	S	%REC	1	01/24/07 02:03

ANALYTICAL RESULTS

Date: Wednesday, January 24, 2007

Client: Environmental Quality Management, Inc.
Client Project: OMC / Waukegan, IL
Client Sample ID: W-4 BB-2
Sample Description:
Sample Matrix: Wipe

Work Order / ID: ME0701741-04
Collection Date: 01/23/07 13:40
Date Received: 01/23/07 17:02

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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PCB'S

Method: SW8082

Prep Date/Time: 01/23/07 00:00 Analyst: AS

Aroclor 1016	A	ND	1.0		µg/Area	1	01/24/07 02:41
Aroclor 1221	A	ND	1.0		µg/Area	1	01/24/07 02:41
Aroclor 1232	A	ND	1.0		µg/Area	1	01/24/07 02:41
Aroclor 1242	A	ND	1.0		µg/Area	1	01/24/07 02:41
Aroclor 1248	A	1.6	1.0		µg/Area	1	01/24/07 02:41
Aroclor 1254	A	ND	1.0		µg/Area	1	01/24/07 02:41
Aroclor 1260	A	ND	1.0		µg/Area	1	01/24/07 02:41
Aroclor 1262	A	ND	1.0		µg/Area	1	01/24/07 02:41
Aroclor 1268	A	ND	1.0		µg/Area	1	01/24/07 02:41
Total PCB's	A	1.6	1.0		µg/Area	1	01/24/07 02:41
Surr: Tetrachloro-m-xylene	S	100	35.2-147		%REC	1	01/24/07 02:41
Surr: Decachlorobiphenyl	S	100	5-159		%REC	1	01/24/07 02:41

ANALYTICAL RESULTS

Date: Wednesday, January 24, 2007

Client: Environmental Quality Management, Inc.
 Client Project: OMC / Waukegan, IL
 Client Sample ID: W-5 B-2
 Sample Description:
 Sample Matrix: Wipe

Work Order / ID: ME0701741-05
 Collection Date: 01/23/07 13:55
 Date Received: 01/23/07 17:02

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
PCB'S							
	Method: SW8082			Prep Date/Time: 01/23/07 00:00 Analyst: AS			
Aroclor 1016	A	ND	1.0		µg/Area	1	01/24/07 03:14
Aroclor 1221	A	ND	1.0		µg/Area	1	01/24/07 03:14
Aroclor 1232	A	ND	1.0		µg/Area	1	01/24/07 03:14
Aroclor 1242	A	ND	1.0		µg/Area	1	01/24/07 03:14
Aroclor 1248	A	1.8	1.0		µg/Area	1	01/24/07 03:14
Aroclor 1254	A	ND	1.0		µg/Area	1	01/24/07 03:14
Aroclor 1260	A	ND	1.0		µg/Area	1	01/24/07 03:14
Aroclor 1262	A	ND	1.0		µg/Area	1	01/24/07 03:14
Aroclor 1268	A	ND	1.0		µg/Area	1	01/24/07 03:14
Total PCB's	A	1.8	1.0		µg/Area	1	01/24/07 03:14
Surr: Tetrachloro-m-xylene	S	95.0	35.2-147		%REC	1	01/24/07 03:14
Surr: Decachlorobiphenyl	S	125	5-159		%REC	1	01/24/07 03:14

ANALYTICAL RESULTS

Date: Wednesday, January 24, 2007

Client: Environmental Quality Management, Inc.
Client Project: OMC / Waukegan, IL
Client Sample ID: W-6 CEILING 2
Sample Description:
Sample Matrix: Wipe

Work Order / ID: ME0701741-06
Collection Date: 01/23/07 14:00
Date Received: 01/23/07 17:02

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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PCB'S

Method: SW8082

Prep Date/Time: 01/23/07 00:00 Analyst: AS

Aroclor 1016	A	ND	1.0		µg/Area	1	01/24/07 03:47
Aroclor 1221	A	ND	1.0		µg/Area	1	01/24/07 03:47
Aroclor 1232	A	ND	1.0		µg/Area	1	01/24/07 03:47
Aroclor 1242	A	ND	1.0		µg/Area	1	01/24/07 03:47
Aroclor 1248	A	ND	1.0		µg/Area	1	01/24/07 03:47
Aroclor 1254	A	ND	1.0		µg/Area	1	01/24/07 03:47
Aroclor 1260	A	ND	1.0		µg/Area	1	01/24/07 03:47
Aroclor 1262	A	ND	1.0		µg/Area	1	01/24/07 03:47
Aroclor 1268	A	ND	1.0		µg/Area	1	01/24/07 03:47
Total PCB's	A	ND	1.0		µg/Area	1	01/24/07 03:47
Surr: Tetrachloro-m-xylene	S	175	35.2-147	S	%REC	1	01/24/07 03:47
Surr: Decachlorobiphenyl	S	170	5-159	S	%REC	1	01/24/07 03:47

ANALYTICAL RESULTS

Date: Wednesday, January 24, 2007

Client:	Environmental Quality Management, Inc.	Work Order / ID:	ME0701741-C7
Client Project:	OMC / Waukegan, IL	Collection Date:	01/23/07 00:00
Client Sample ID:	Chip Sample	Date Received:	01/23/07 17:02
Sample Description:			
Sample Matrix:	Solid		

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
PCB'S	Method: SW8082		Prep Date/Time: 01/23/07 19:30 Analyst: AS				
Aroclor 1016	A	ND	3.3	mg/Kg	10	01/24/07 15:20	
Aroclor 1221	A	ND	3.3	mg/Kg	10	01/24/07 15:20	
Aroclor 1232	A	ND	3.3	mg/Kg	10	01/24/07 15:20	
Aroclor 1242	A	ND	3.3	mg/Kg	10	01/24/07 15:20	
Aroclor 1248	A 13		3.3	mg/Kg	10	01/24/07 15:20	
Aroclor 1254	A	ND	3.3	mg/Kg	10	01/24/07 15:20	
Aroclor 1260	A	ND	3.3	mg/Kg	10	01/24/07 15:20	
Aroclor 1262	A	ND	3.3	mg/Kg	10	01/24/07 15:20	
Aroclor 1268	A	ND	3.3	mg/Kg	10	01/24/07 15:20	
Total PCB's	A 13		3.3	mg/Kg	10	01/24/07 15:20	
Surr: Tetrachloro-m-xylene	S 50.1		5-165	%REC	10	01/24/07 15:20	
Surr: Decachlorobiphenyl	S 50.1		5-222	%REC	10	01/24/07 15:20	

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

NA	=	Not Analyzed	N/A	=	Not Applicable		
mg/L	=	Milligrams per Liter (ppm)	ug/L	=	Micrograms per Liter (ppb)	cfu	= Colony Forming Unit
mg/Kg	=	Milligrams per Kilogram (ppm)	ug/Kg	=	Micrograms per Kilogram (ppb)	ng/L	= Nanograms per Liter (ppt)
U	=	Undetected					
J	=	Analyte concentration detected between RL and MDL (Metals / Organics)					
B	=	Detected in the associated Method Blank at a concentration above the routine PQL/RL					
b	=	Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL					
D	=	Surrogate recoveries are not calculated due to sample dilution					
ND	=	Not Detected at the Reporting Limit (or the Method Detection Limit, if listed)					
E	=	Value above quantitation range					
H	=	Analyte was prepared and/or analyzed outside of the analytical method holding time					
I	=	Matrix Interference					
R	=	RPD outside accepted recovery limits					
S	=	Spike recovery outside recovery limits					
Surr	=	Surrogate					
DF	=	Dilution Factor	RL	=	Reporting Limit	ST	= Sample Type
						MDL	= Method Detection Limit

SAMPLE TYPES

A	=	Analyte
I	=	Internal Standard
S	=	Surrogate
T	=	Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

MBLK	=	Method Blank	ICSA	=	Interference Check Standard "A"	OPR	=	Ongoing Precision and Recovery Standard
DUP	=	Method Duplicate	ICSAB	=	Interference Check Standard "AB"			
LCS	=	Laboratory Control Sample	LCSD	=	Laboratory Control Sample Duplicate			
MS	=	Matrix Spike	MSD	=	Matrix Spike Duplicate			
ICB	=	Initial Calibration Blank	CCB	=	Continuing Calibration Blank			
ICV	=	Initial Calibration Verification	CCV	=	Continuing Calibration Verification			
PDS	=	Post Digestion Spike	SD	=	Serial Dilution			

CERTIFICATIONS

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

MICROBAC LOCATIONS

Corporate	-	Wexford, PA	Camp Hill Division	-	Camp Hill, PA
Pittsburgh Division	-	Warrendale, PA	Knoxville Division	-	Maryville, TN
Erie Division	-	Erie, PA / Wilkes-Barre, PA	Venice Division	-	Venice, FL / Fort Myers, FL
New Castle Division	-	New Castle, PA	South Carolina Division	-	New Ellenton, SC
Kentucky Testing Division	-	Louisville, KY / Evansville, IN	Fayetteville Division	-	Fayetteville, NC
Massachusetts Division	-	Marlboro, MA	Southern Testing Division	-	Wilson, NC
Gascoyne Division	-	Baltimore, MD	Hauser Division	-	Boulder, CO
Corona Division	-	Corona, CA	Friend Laboratory	-	Waverly, NY
South Jersey Division	-	Turnersville, NJ			



COOLER INSPECTION

Date: Wednesday, January 24, 2007

Client Name **EQM - CINCINNATI**

Date / Time Received: **1/23/2007 5:02:00 PM**

Work Order Number **ME0701741**

Received by: SM

Checklist completed by SM 1/23/2007 5:08:16 PM

Reviewed by RM 1/24/2007 4:22:57 PM

Carrier name: Client Delivered

After-Hour Arrival?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Shipping container/cooler in good condition?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included sufficient client identification?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included sufficient sample collector information?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included a sample description?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody identified the appropriate matrix?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included date of collection?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included time of collection?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody identified the appropriate number of containers?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody identified the appropriate preservatives?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples properly preserved?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

If No, adjusted by?

Date/Time

Chain of custody included the requested analyses?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples received on ice?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Container/Temp Blank temperature

Temp: °C

VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

General Comments:

Sample ID	Client Sample ID	Comments
ME0701741-01A	W-1 BEAM	
ME0701741-02A	W-2 BB-1	
ME0701741-03A	W-3 CEILING	
ME0701741-04A	W-4 BB-2	
ME0701741-05A	W-5 B-2	
ME0701741-06A	W-6 CEILING 2	
ME0701741-07A	Chip Sample	

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